30. (New) The method of claim 29, wherein calculating a calculated checksum for the decrypted data packet further comprises:
a network layer of a protocol stack calculating the calculated checksum.

31. (New) The method of claim 29, wherein detecting a loss of stream cipher synchronization if the calculated checksum does not match a checksum extracted from the decrypted data packet further comprises:
a network layer of a protocol stack detecting the loss of stream cipher synchronization.

32. (New) The method of claim 29, wherein the checksum extracted from the decrypted data packet further comprises:
a checksum extracted from a network layer header of the decrypted data packet.

33. (New) The method of claim 29, further comprising:
the calculated checksum and the checksum extracted from the decrypted data packet both for a network layer data payload.

34. (New) The method of claim 33, wherein the checksum extracted from the decrypted data packet further comprises:
a checksum extracted from a network layer header of the decrypted data packet.

35. (New) The method of claim 29, further comprising:
re-synchronizing a stream cipher with a transmitter of the encrypted data packet if the calculated checksum does not match the checksum extracted from the decrypted data packet.

36. (New) The method of claim 35, wherein the checksum extracted from the decrypted data packet further comprises:

a checksum extracted from a network layer header of the decrypted data packet.